

Organization: **T028000** Bidder: **Jeff**  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
If Undeliverable Return in Ten Days

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE, \$300

AN EQUAL OPPORTUNITY EMPLOYER

UNITED STATES POSTAGE  
02 1A  
0004204479  
MAILED FROM ZIP CODE 22314



RECEIVED

MAR 21 2007

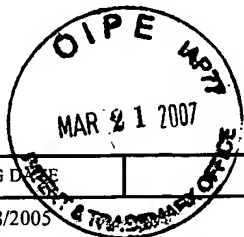
USPTO MAIL CENTER



# UNITED STATES PATENT AND TRADEMARK OFFICE

*Ifw*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov



| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/525,722      | 02/28/2005  | Hideki Etori         | TAD-C538            | 8299             |

7590  
George A. Loud, Esquire  
BACON & THOMAS  
Fourth Floor  
625 Slaters Lane  
Alexandria, VA 22314-1176

03/20/2007

| EXAMINER |
|----------|
|----------|

BENNETT, ZAHRA I

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2875

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 03/20/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/525,722

Applicant(s)

ETORI, HIDEKI

Examiner

Zahra Bennett

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 6-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

The drawings were received on December 26, 2006. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 6-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Bourdelais et al. (US 6,846,098).

With respect to claim 1, Bourdelais teaches a light control film (Figure 1: 12) having rough surface pattern (22) defining, for each cross-section perpendicular to a base plane (20) of the film, a profile curve along an edge contoured by the rough surface pattern, wherein in any cross section perpendicular to a base plane of the film, the profile curve has an average of absolute values of slope to the base plane (Column 7, lines 7-16 and Column 10, lines 10-20).

Art Unit: 2875

With respect claim 2, Bourdelais teaches a light control film (Figure 1: 12) including a surface layer (22), the surface layer having a rough surface pattern defining, for each cross section perpendicular to a base plane of the film, a profile curve along an edge contoured by the rough surface pattern, the surface layer formed of a material having a refractive index  $n$  (Column 12, lines 37-46), wherein for substantially all cross sections perpendicular to a base plane of the film, the profile curve has an average of absolute values of slope to the base plane (Column 7, lines 7-16 and Column 10, lines 10-20).

With respect to claim 3, Bourdelais teaches that difference in the average absolute value of slope between cross sections in different directions (Column 7, lines 7-16 and Column 10, lines 10-20).

Regarding claims 1-3, Bourdelais discloses the claimed except for the degree ranges. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have the claimed degree ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Art Unit: 2875

With respect to claims 6 and 8, Bourdelais teaches a backlight (Figure 2) comprising a light control film (12), and a light source (18), wherein the light control film has a profile curve on a cross section approximately orthogonally crossing a longitudinal axis of the light source which, divided into segments at a certain interval, has an average of absolute values of slope calculated for all segments facing the light source which increases gradually from a cross section in a first direction towards another cross section in a second direction perpendicular to the first direction or towards the light source (Figure 1, see Column 5, lines 45-50).

With respect to claim 7, Bourdelais teaches that the slope of the profile curve to the base plane increases or decreases gradually from one end towards another end of the film (Figure 1, see Column 5, lines 45-50).

With respect to claim 9, Bourdelais teaches a backlight (Figure 2) comprising a light control film (12), and a light source (18), wherein the light control film has a profile curve on a cross section approximately orthogonally crossing a longitudinal axis of the light source which, divided into segments at a certain interval, has an average of absolute values of slope calculated for all segments facing the light source which decreases towards the light source (Column 25, lines 40-44).

With respect to claim 10, Bourdelais teaches a backlight device (Figure 2) comprising a light guiding plate (2), at least one light source (18) located at an edge

Art Unit: 2875

thereof, the light guiding plate having a light emergent surface (not labeled) approximately orthogonal to the edge, and a light control film (12) located on the light emergent surface of the light guiding plate.

With respect to claim 11, Bourdelais teaches that the light control film (Figure 2: 12) is located so that the one direction is parallel to the one end of the light guiding plate (2) where the light source (18) is located.

With respect to claim 12, Bourdelais teaches a light source (Figure 2), and a light diffusing material (2) between the light source (18) and the light control film (12).

With respect to claim 13, Bourdelais teaches a light guiding plate (Figure 2: 2) equipped with a light source (18) at least on one end and having a light emergent surface almost orthogonally crossing the one end, and a light control film (12) located on the light emergent surface of the light guiding plate.

With respect to claims 14-17, Bourdelais discloses the claimed except for the degree ranges. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have the claimed degree ranges, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With respect to claim 18, Bourdelais teaches a light source, wherein the light control film (Figure 1: 12) has a profile curve on a cross section approximately orthogonally crossing a longitudinal axis of the light source (Figure 2: 18) which, divided into segments has an average of absolute values of slope calculated for all segments facing the light source which increases towards the light source (Figure 1, see Column 5, lines 45-50).

#### ***Allowable Subject Matter***

Claims 4 and 5 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to show or teach a light control film satisfying formulas 1-4, as claimed.

#### ***Response to Arguments***

Applicant's personal interview and arguments, see pages 1-3, filed December 26, 2007, with respect to the rejection(s) of claim(s) 1-13 under 35 U.S.C. 112 and 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Bourdelais.



***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cowan et al. (US Patent 6,608,722) and Kaminsky et al. (US Patent 6,898,012) teach a light control film having a rough surface pattern.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

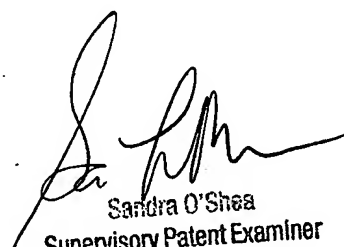
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zahra Bennett whose telephone number is 571-272-2267. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on 571-272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2875

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ZB



Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800

|                                   |                                       |  |   |             |
|-----------------------------------|---------------------------------------|--|---|-------------|
| <b>Notice of References Cited</b> | Application/Control No.<br>10/525,722 |  | Applicant(s)/Patent Under<br>Reexamination<br>ETORI, HIDEKI |             |
|                                   | Examiner<br>Zahra Bennett             |  | Art Unit<br>2875  | Page 1 of 1 |

**U.S. PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Name              | Classification |
|---|---|--|-----------------|-------------------|----------------|
| * | A | US-6,608,722                                     | 08-2003         | Cowan et al.      | 359/599        |
| * | B | US-6,846,098                                     | 01-2005         | Bourdelaïs et al. | 362/330        |
| * | C | US-6,898,012                                     | 05-2005         | Kaminsky et al.   | 359/599        |
|   | D | US-  |                 |                   |                |
|   | E | US-  |                 |                   |                |
|   | F | US-  |                 |                   |                |
|   | G | US-  |                 |                   |                |
|   | H | US-  |                 |                   |                |
|   | I | US-  |                 |                   |                |
|   | J | US-  |                 |                   |                |
|   | K | US-  |                 |                   |                |
|   | L | US-  |                 |                   |                |
|   | M | US-  |                 |                   |                |

**FOREIGN PATENT DOCUMENTS**

| * |   | Document Number<br>Country Code-Number-Kind Code | Date<br>MM-YYYY | Country | Name | Classification |
|---|---|--|-----------------|---------|------|----------------|
|   | N |  |                 |         |      |                |
|   | O |  |                 |         |      |                |
|   | P |  |                 |         |      |                |
|   | Q |  |                 |         |      |                |
|   | R |  |                 |         |      |                |
|   | S |  |                 |         |      |                |
|   | T |  |                 |         |      |                |

**NON-PATENT DOCUMENTS**

| * |   | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
|---|---|---|
|   | U |   |
|   | V |   |
|   | W |   |
|   | X |   |

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.